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U.S. Interstate Commerce Commission

Railroad accident investigation
no. 1651-1700

Dept. of Transportation
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JUL 10 1936
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INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE PENNSYLVANIA RAILROAD AT SOUTH ELIZABETH, N. J., ON JULY 19, 1930.

August 27, 1930.

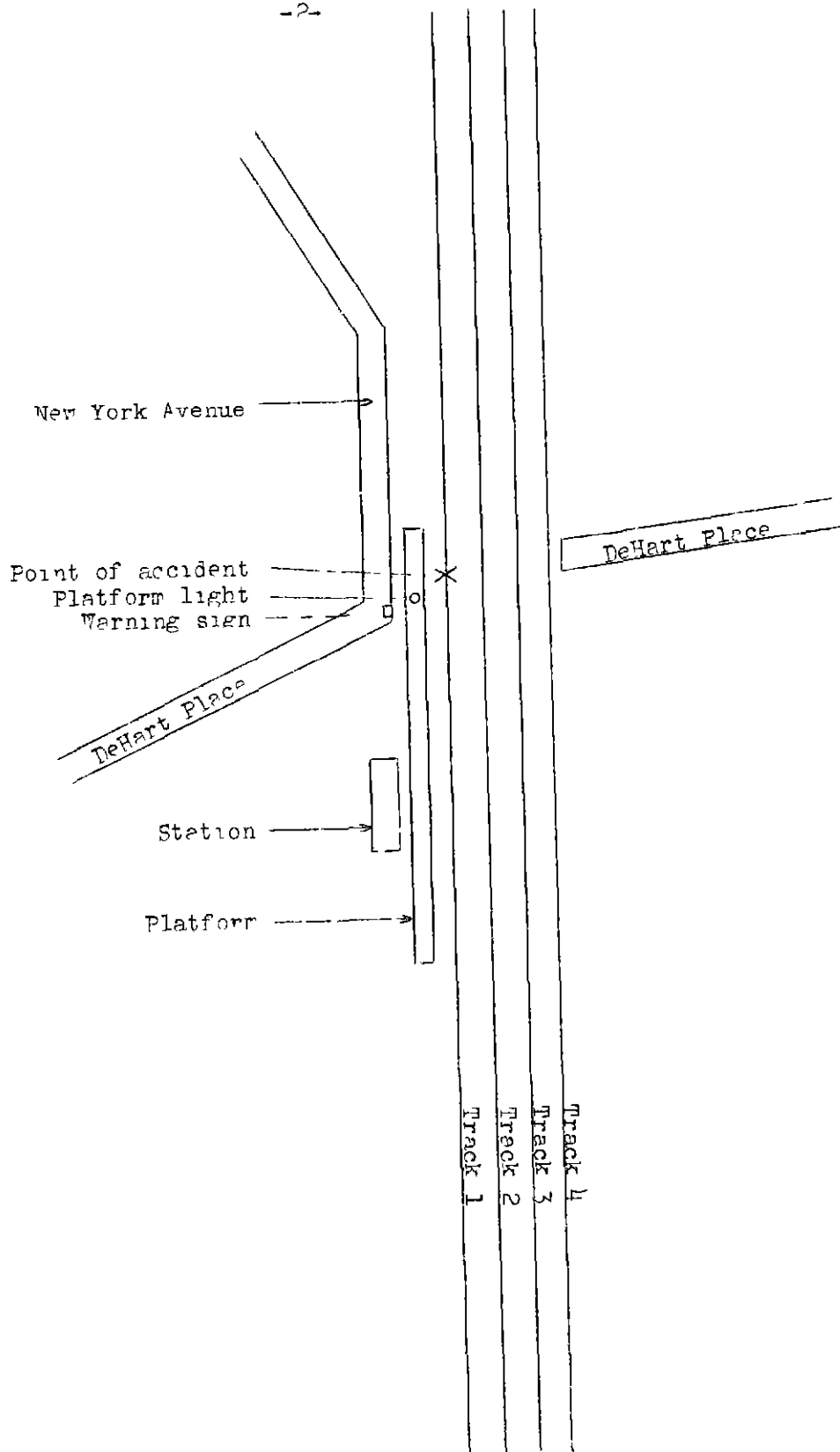
To the Commission:

On July 19, 1930, there was a derailment of a passenger train as a result of striking an automobile on the tracks of the Pennsylvania Railroad at South Elizabeth, N. J., resulting in the death of 1 passenger, and the injury of 54 passengers, 3 employees on duty and 12 employees off duty. This accident was investigated in conjunction with representatives of the New Jersey Board of Public Utility Commissioners.

Location and method of operation

This accident occurred on the New York Division which extends between Holmes, Pa., and New York, N. Y., a distance of 78.4 miles, and is a 4-track line over which trains are operated by time-table and an automatic block-signal system. The tracks are numbered, from south to north, 1, 2, 3, and 4, the accident occurring on track 1 at a point 200 feet west of the station at South Elizabeth. Approaching this point from the west there is a 0° 30' curve to the right 150 feet in length, from which point the track is tangent to the point of accident, a distance of approximately 3,900 feet, and for some distance beyond. The grade at the point of accident is 0.2 per cent descending for eastbound trains.

The station at South Elizabeth is located on the south side of the tracks and the station platform extends 260 feet west and 50 feet east, respectively, from the station. This platform is supported on the track side by a concrete curb 27 inches from the south rail and 12 inches above the top of the ties. There is a street known as DeHart Place on the south side of the track which approaches the railroad at an angle of approximately 75 degrees and ends at the station platform about 180 feet west of the station, the street and platform being on the same level. This same street extends northward beyond the tracks but there is no crossing at this point. Beginning at the end of DeHart Place on the south side of the tracks, New York Avenue parallels the track westward for a distance of 240 feet and then veers to the



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Pennsylvania Railroad
South Elizabeth, N.J.
July 19, 1970

left. Approaching the platform on DeHart Place the grade is slightly ascending. There is a light on the west end of the platform located at about the center line of DeHart Place and there is a warning sign, also located about the center of DeHart Place, which is 6 feet 6 inches south of the platform. This sign is hexagon shape, 11½ inches wide and 24 inches long and is mounted 4 feet 2 inches above the ground. At the time of the accident the lettering on this sign was illegible, although it originally read "DANGER - ROAD LND - Police Dept."

The weather was clear and it was dark at the time of the accident, which occurred about 9.29 p.m.

Description

Eastbound passenger train No. 228 consisted of four coaches, one Pullman club car, and three Pullman parlor cars, all of steel construction, hauled by engine 3806, and was in charge of Conductor Howland and Engineman Gaffney. This train passed "DK" block station, 4.9 miles west of South Elizabeth, at 9.24 p.m., on time, and was derailed after colliding with an automobile at South Elizabeth while traveling at a speed estimated to have been about 55 miles per hour.

The automobile involved, a Studebaker Brougham, entered DeHart Place from South Street at a point about 320 feet south of the railroad and continued northward, was driven off the end of the street and over the station platform, and it was standing on track 1 when it was struck by train No. 228.

The engine and tender came to rest on their left sides on tracks 1 and 2 approximately 1,160 feet east of the point where the engine collided with the automobile. The first four cars in the train were also derailed, the first car remaining in an upright position and in line with the track about 10 feet to the rear of the tender, the second and third cars were derailed to the south and fell over a 12-foot retaining wall immediately behind the first car and rested on their right sides on an adjoining street, while the fourth car stopped in an upright position with its forward end extending over this wall at an angle of about 45 degrees.

Summary of evidence

Engineman Gaffney stated he was looking ahead observing signal indications while approaching South Elizabeth. After receiving a clear signal indication on the home signal, located about 1,000 feet west of the point

of accident, he continued to look ahead for the indication of the next signal in advance which is located about 1,120 feet east of the point of accident. Just about the time the latter signal came into view he noticed a small light on the track which he described as resembling a cow light of an automobile, the engine striking an obstruction very shortly afterwards. He had made an 8 or 10-pound brake-pipe reduction just before reaching the home signal for the purpose of reducing speed when rounding the next curve in advance of the point of accident, the brake valve still being in lap position when this light appeared a short distance ahead, and he immediately applied the brakes in emergency. He did not know that the engine was derailed until it struck the girder of the bridge which spans a street approximately 800 feet east of the station. He estimated the speed of the train at the time it struck the automobile at 50 to 55 miles per hour, but he could give no estimate of its speed at the time he realized the engine was derailed. He also said that the headlight of his engine was burning brightly and that the lights were burning on the station platform, but he was unable to distinguish any object on the track other than the light alongside the platform.

Firman Terhune stated that a service application of the brakes was made while approaching the station at South Elizabeth to reduce the speed for the curve beyond the station, and as the train line exhaust had stopped blowing he knew the brakes were applied. He did not know whether a second application was made, as there was considerable noise when the engine struck something which he learned later was an automobile. He was riding on his seatbox looking for signal indications and did not see the automobile on the track; his first intimation of anything out of the ordinary was when his attention was attracted by a man running northward across the tracks about 50 feet ahead of the engine.

Conductor Howland stated that he felt a service application of the brakes while approaching South Elizabeth, which appeared to have the desired effect. A short time later he went from the third coach into the second coach; this car started rolling from side to side and very shortly afterwards it overturned and fell over the retaining wall. He said that he felt a heavy application of the brakes when he entered the second car, and he attempted to pull the conductor's emergency valve but was unable to reach it before the car overturned.

Flagman Zirwis stated that he was riding in the rear car of the train approaching South Elizabeth; when he felt a sudden jolt of the car he realized something was wrong, he procured flagging equipment and as soon as the train stopped he went back to flag. He estimated the speed of the train at 55 to 60 miles per hour when a service application of the brakes was made previous to the time of the jolt which occurred just before the train stopped.

Road Foreman of Engines Hipkins stated that he examined engine 3006 at the scene of accident and found the throttle closed, the brake valve in emergency position and the reverse lever in forward motion. He assisted in making an air-brake test on the three rear cars, which remained on the track, and this test showed the brakes were in proper working order.

Arthur N. Allcroft, owner and driver of the automobile involved in the accident, described the machine as a Studebaker Brougham, 1925 model, equipped with rear wheel brakes and a brake on the transmission; it was equipped with two headlights and two cowl lights. He said that he spent the evening prior to the accident in company with James Allcroft, a brother, and a friend, William McNair; during the course of the evening they stopped at a cafe and while at that place Mr. McNair and his brother drank some beer but nothing stronger, and that he refrained from drinking anything intoxicating. After making other movements he drove the car into DeHart Place from South Street with only the cowl lights burning, as it was not his practice to operate the car in the city at night with the headlights burning. The car continued towards the railroad, traveling at a speed of 15 or 20 miles per hour, it being his intention to turn to the left into New York Avenue at the intersection of these streets, but he did not realize or observe that the car had reached the end of DeHart Place until it had passed over the station platform and dropped upon the track. He promptly looked towards the left or westward and observed the bright headlight of a train approximately 1 mile distant. He turned the car to the left towards the approaching train, and attempted to drive it along the track, having in mind that perhaps he could get it off the track at the west end of the platform, but after the car had moved a distance of about its own length it stalled. He then tried to back the car onto the adjoining track but was unable to move it on account of the wheels slipping. While he was attempting to get the car off the track he said he switched on the bright headlights and at that time he thought the train was about $\frac{1}{2}$ mile away. In the meantime the other occupants of the automobile had gotten out and realizing the danger he also got out only an instant before the collision occurred. Mr. Allcroft further

stated that he has been a resident of Elizabeth during the past 5 years and that he has operated an automobile for 15 years. He was aware that DeHart Place was a blind street and knew there was no barrier at the end of this street to prevent vehicles from running upon the tracks at that point. He did not remember whether he had ever used this street while running in the same direction prior to the date of the accident, although 2 or 3 years previously he operated a car over it in the opposite direction.

James W. Allcroft stated that he is not a resident of Elizabeth and was not familiar with the streets. He said that after he and his brother met Mr. McNair the three of them entered a cafe where he ate a sandwich but did not drink any intoxicating beverage and did not know whether the others did or not. After leaving the cafe he rode in the front seat beside the driver and noticed that lights were burning on the forward end of the car. He thought the automobile was traveling at a speed of from 25 to 30 miles per hour when he felt a sudden jar which appeared to have been caused by striking a rut or other depression. The car immediately swerved to the left and continued to bump as though it was passing over ties and when he noticed the row of signal lights ahead he realized that the car was on the railroad. Looking beyond the signal lights he saw another light which appeared to be the headlight of a train. He then left the car and ran across the tracks to a fence, the inter-track fence between tracks 3 and 4, and lay down to avoid personal injuries when the collision occurred.

William McNair stated that he met the Allcroft brothers about 8.30 p.m., daylight saving time, and shortly afterwards they entered a cafe and each of them drank two small glasses of beer. He was familiar with conditions existing at the dead end of DeHart Place where this street meets New York Avenue, having previously traveled over that route, but did not know whether the driver, Arthur Allcroft, was familiar with that locality. There was no conversation being held while traveling northward on DeHart Place and he was unable to state whether the driver was awake when the car passed the end of the street. He did not call the attention of the driver to the conditions while the car was moving towards the railroad, as his attention was directed to a dog which was in the rear of the car with him, and he was unaware that the car had passed the intersection until it dropped upon the track. He estimated the speed of the automobile while it moved through DeHart Place at 15 or 20 miles per hour. He immediately got out and when he observed a train approaching from the west he called to the other occupants to do

likewise. He said the weather was clear and it was dark, and there was neither fog nor smoke to interfere with the visibility.

Section Foreman Cocco stated that he has been in charge of the section on which the accident occurred for about 10 years and resides a short distance from the station. The only instance he knew of during that time of an automobile running upon the track at the end of DeHart Place, which he assisted in removing, was about one year ago. He heard of another case from a former section laborer which occurred during the past year, and on both occasions he verbally reported the facts to the supervisor.

Supervisor Gerry stated that he could not recall if Foreman Cocco advised him that automobiles had been driven on the track at DeHart Place, although the foreman may have done so and he did not pay particular attention.

Supervisor Chandler stated that he had no knowledge of automobiles being driven upon the platform or across it prior to the date of the accident. He said the surface of DeHart Place and the platform were practically level, with no line of demarcation, but he considered the conditions at that point safe for a careful automobile driver. It was his opinion that the city should place a reflector sign at this point to provide vehicular traffic protection.

Division Engineer White stated that there is an iron fence across the end of DeHart Place on the north side of the tracks, which was erected by the railroad company, but he did not know when or why it was built. He thought the traffic approaching on that side of the tracks was similar to that on the south side but thought the entrance to the platform on the south side should be left open for the accommodation of passengers although there is a highway leading to the station. In his opinion a proper warning sign should be erected by municipal authorities at this location. He said the illegible sign at this point was of no value and it was his intention to request the city to place a red reflector sign there. He knew of no reports prior to the accident that a hazardous situation existed at that point.

G. R. Kelly stated that he resides on DeHart Place in close proximity to the scene of accident and has lived at the same location for 6 or 7 years. In addition to the automobile involved in the accident he had knowledge

of numerous instances wherein automobiles ran upon the station platform but were stopped short of the tracks. He knew of three other cases of automobiles being driven across the platform and upon the tracks, one of which he witnessed during the night of the past Easter Sunday and the following day he addressed a letter to the complaint department of the Pennsylvania Railroad, calling the company's attention to the situation and suggesting steps be taken to remedy this condition, to which he received no reply.

M. L. Lippincott stated that his residence is on DeHart Place near the scene of accident and that he knew of many instances where automobiles have been driven upon the station but were stopped before reaching the tracks. He cited two cases of automobiles passing over the platform and not being stopped until they were on the tracks, the last occurrence being on Easter Sunday night. The next day he informed the signal maintainer and the section foreman of the railroad and also a police officer of the city of the occurrence.

A. J. Hoffacker, a former councilman of Elizabeth, in an interview with the Commissioner's inspectors, stated that some time prior to April 11, 1929, he made a written report to the Board of Public Works calling attention to the dangerous condition, among others that existed at the intersection of New York Avenue, and DeHart Place and requested that an arc light or a traffic light be placed at this point. It also appears that some time in August, 1929, he brought this matter to the attention of the Police Commission and it was suggested that reflector signs be placed at this point.

Commissioner Hennessy, Chairman of the Department of Public Works at Elizabeth, stated that there was no record to show when the warning sign at DeHart Place was installed. He knew of no complaint made that a dangerous situation existed at the end of this street, and if a report had been made it would have been referred to the street commissioner. He, however, produced the minutes of a meeting held by his department on April 11, 1929, which contained an item referring to a communication from Councilman Hoffacker recommending that an arc light or traffic light be placed at DeHart Place and New York Avenue, this communication being referred to the committee on street lighting. He said no further action was taken with respect to this communication as consideration was then being given to revision of the lighting system of the city, and that the recommendation of Mr. Hoffacker would be taken care of in the progress of this work.

Street Commissioner Neofson stated that he has been employed in that capacity for the past 18 years and during that time he has never heard of any complaints concerning the traffic situation at DeHart Place and New York Avenue.

Tests conducted subsequent to the accident disclosed that with automobile headlights burning brightly the wheel wear on the surface of DeHart Place could be distinguished and could be seen to turn into New York Avenue. This same test also showed that while approaching the end of DeHart Place the inter-track fence between tracks 3 and 4 could be plainly seen. Approaching the end of this street without the headlights burning, the lane of traffic and the inter-track fence were barely discernible.

Conclusions

This accident was caused by an automobile being driven upon the track in front of an approaching train, for which Arthur N. Alleroft is directly responsible. The city authorities and the railroad company are at fault for not providing adequate safeguards at the railroad tracks at the end of this street.

It appears that the engine crew of train No. 228 had no warning that there was an obstruction on the track until the engineer saw a small light directly in front of the engine and he immediately applied the brakes in emergency but it was then too late to prevent the accident.

According to the statements of the driver of the automobile he was somewhat familiar with the locality in which the accident occurred, and he operated his car into DeHart Place only a short distance from the end of the street with the intention of turning into New York Avenue at the intersection of these two streets. In view of the fact that only the cowl lights were burning he did not discover that he had passed the intersection until the front end of the car dropped off the station platform and upon the track. He then made an effort to get the car off the track but was unable to do so before the approaching train reached that point. A test after the accident revealed that the rays of automobile headlights showed the line of travel on DeHart Place and also the inter-track fence directly ahead. Had Mr. Alleroft been operating his car with the headlights in operation and had he been fully alert he should have observed that he was nearing the end of the street in time either to stop the car before it passed over the platform or to turn into New York Avenue as intended.

The only indication that DeHart Place ends at the railroad station platform was a warning sign located in about the center of the street a short distance south of the platform, and at the time of the accident the lettering on this sign was illegible. The evidence indicates that attention of both the railroad company and the city authorities had been called to the dangerous condition that existed at this point and that there had been numerous instances of automobiles running beyond the end of the street and upon the platform, and in some cases the cars were not stopped before completely passing over the platform and upon the tracks. Notwithstanding the fact that a hazard was known to exist at this point, steps which were necessary to remedy the situation both from a standpoint of the safe operation of trains, as well as providing adequate safety to vehicular traffic were not taken until after this accident. Since the accident, however, the railroad company has erected a fence across the end of DeHart Place forming a barrier as well as giving warning that the street ends at that point.

The employees involved were experienced men, and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,

Director.